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## Performance Verification of Source Water Protection Technologies

The USEPA and NSF International have partnered to develop a program for verification of technologies used to protect ground and surface waters from contamination. The goal of the SWP Pilot is to verify the performance of commercial-ready technologies, following technically sound protocols and appropriate QA/QC, to provide purchasers and permittees with an independent and credible assessment of the technology. The key outputs of the Pilot will be quality test data and EPA/NSF verified test reports.

Two Stakeholder Advisory Groups have been established for the Pilot:

### *Decentralized Wastewater Treatment Infrastructure & Watershed Protection*

Initially, the Decentralized Wastewater Treatment group is developing protocols for high strength/commercial wastewater, nutrient reduction, package wastewater treatment plants and disinfection technologies.

Technologies being addressed by the Infrastructure & Watershed Protection group include coatings and grouts for sewer system rehabilitation, and animal waste treatment technologies. Other technology areas will be identified, and may include real time treatment plant controls, precision agriculture and erosion control technologies.

Notice of the availability of draft protocols for review will be sent to the SWP mailing list. The protocols will be posted for comment on the ETV and NSF web sites. Additional technology areas will be identified and incorporated into the Pilot as the project proceeds.

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## Benefits of Technology Verification

The ETV Program has five essential elements from which maximum benefit is derived:

- Testing available to all vendors within a category
- Preexisting, publicly available, reproducible protocols and test plans
- Objective, third-party testing
- Quality management and data acquisition
- Public availability of test results

**Technology users.** Objective, credible performance data from valid verification testing will reduce financial risk and assist in selection of technologies for specific applications.

**Manufacturers/vendors.** Vendors benefit from technology acceptance for their products arising from an EPA-reviewed, independent, third-party report supporting manufacturer's claims.

**Technology enablers.** Engineering firms will have quality-assured data, through standardized tests and objective reporting, to assist in technology selection for SWP applications.

**Regulatory agencies.** The availability of verified technologies will facilitate permit writing and assist regulators responsible for authorizing use of technologies for given applications.

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## Stakeholder Involvement

**Stakeholder Advisory Groups.** These groups (15-25 individuals) will help establish the priorities of the Pilot and guide its implementation. Each Group is comprised of volunteers from all sectors including technology users, vendors, regulatory agencies, and consultants.

**Technology Panels.** Panels are comprised of individuals with specific technical expertise to oversee the development of the test protocols for a given technology.

**Contract Organizations.** NSF may contract with consulting engineers, scientific organizations and/or academic institutions for:

- development of test protocols
- development and operation of field testing sites
- peer review of documents

**Stakeholder Review.** NSF and EPA are committed to an open process. Pilot documents, such as test protocols, will be available to all stakeholders for review and comment.

**Technology Vendors.** Manufacturers voluntarily provide equipment and technical support at no cost to the program. Pilot funds may be available to help defray some costs associated with testing.

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## Participating Organizations

The SWP Pilot involves many organizations, regulatory agencies, technology vendors and engineers. Three organizations partnering with NSF in the Pilot are:

*National Environmental Health Association  
National Onsite Wastewater Recycling Association  
National Small Flows Clearinghouse*

Other stakeholders will become involved as the Pilot moves forward. Organizations represented on Stakeholder Advisory Groups include the partner organizations and the following:

*American Academy of Environmental Engineers  
American Public Works Association  
American Society of Agricultural Engineers  
American Society of Civil Engineers  
American Water Works Association  
Association of State Drinking Water Administrators  
Ayres Associates  
Association of Metropolitan Sewerage Agencies  
Brown & Root Services  
Chesapeake Bay Commission  
Coalition for Alternative Wastewater Treatment  
Consortium for Decentralized Wastewater Technology and Management  
Lake County (IL) Health Department  
Louisiana Tech University  
Malcolm Pirnie  
National Association of Conservation Districts  
National Association of State Conservation Agencies  
National Ground Water Association  
National Rural Water Association  
New England Interstate Water Pollution Control Commission  
North Carolina State University  
University of California - Davis  
University of Houston  
Upper Susquehanna Coalition  
U.S. Environmental Protection Agency  
Water Environment Federation  
Water and Wastewater Equipment Manufacturers Association*



NSF International, an independent, not-for-profit organization, is dedicated to public health, safety and protection of the environment by developing standards, providing education, and providing superior third-party conformity assessment services, while representing the interest of all stakeholders.



The Environmental Technology Verification Program was established in 1995 by the U.S. Environmental Protection Agency to accelerate the commercialization and recognition of improved environmental technologies through third party verification and reporting of performance. ETV provides purchasers, permittees, and developers with objective, quality assured performance data on new technologies.

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***Call NSF to get involved with  
the ETV SWP Pilot!***

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## SOURCE WATER PROTECTION TECHNOLOGIES

*An EPA Environmental  
Technology Verification (ETV)  
Pilot*



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